

COMMISSIONER FOR PATENTS
ALEXANDRIA, VA 22313



Docket No. ARC9-2001-0089-US1
(PATENT)

10w 2178

SIR:

Transmitted herewith for filing in the Application of: James Kaufman et al. Serial No.: 10/034,523

Title: SYSTEM AND METHOD FOR HIERARCHICAL SEGMENTATION WITH LATENT SEMANTIC INDEXING IN SCALE SPACE

are the following:

IDS including copies of references cited in prior IDS (\$180.00)

NO ADDITIONAL FEE IS REQUIRED

OTHER THAN A SMALL ENTITY	Claims Remaining After Amendment	Highest No. Previously Paid for	Extra	Rate	Additional Fee
SUBTOTAL FROM ABOVE					\$180.00
TOTAL CLAIMS	18	18	0	× 50 =	\$0.00
INDEPENDENT CLAIMS	3	3	0	× 200 =	\$0.00
MULTIPLE DEP. CLAIM PRESENTED					+360 = \$0.00
					TOTAL \$180.00

Please charge my Deposit Account No. 09-0441 in the amount of \$180.00.
A duplicate copy of this sheet is attached.

The Commissioner is hereby authorized to charge payment for any additional filing fees required under 37 CFR 1.16 or any patent application processing fees under 37 CFR 1.17 in association with this communication or credit any overpayment to Deposit Account No. 09-0441. A duplicate copy of this sheet is attached.

CERTIFICATE OF MAILING

I hereby certify that the above paper/fee is being deposited with the United States Postal Service as first-class mail with sufficient postage in an envelope addressed to Commissioner for Patents, Mail Stop Amendment, P.O. Box 1450, Alexandria, VA 22313-1450.

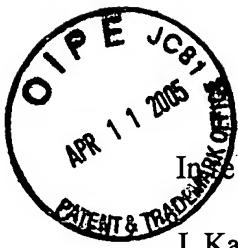
Date of Deposit: April 6, 2005

Person mailing paper/fee: Marc D. McSwain

Signature Marc D. McSwain

Respectfully submitted,
James Kaufman et al.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of : April 4, 2005
J. Kaufman et al. : Group Art Unit: 2176
Serial No.: 10/034,523 : Examiner: Jonathan D. Schlaifer
Filed: December 28, 2001 : San Jose, California
Attorney Docket No.: ARC920010089US1

Title: **SYSTEM AND METHOD FOR HIERARCHICAL SEGMENTATION
WITH LATENT SEMANTIC INDEXING IN SCALE SPACE**

**INFORMATION DISCLOSURE STATEMENT
AFTER MAILING OF FIRST OFFICE ACTION (37 CFR 1.97(c))**

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to Section 707.05(b) of the MPEP and 37 CFR 1.97-1.99, a copy is submitted (attached to forms PTO-1449) of prior art which is considered to be pertinent to the invention as claimed in the above-identified application. Highlighting or other markings are not to be considered significant.

It is requested that the Examiner fully consider the art cited, initial the leftmost column of the attached PTO Forms 1449 adjacent to each cited reference, and return a copy of the Forms 1449 for applicant's records. It is further requested that the art be cited on the cover of any patent issuing from the subject application.

The citation of the above references should not be construed as a representation that an exhaustive search has been made, or that other, more pertinent art is not available.

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-1-

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Nor does this statement constitute an admission by applicant or applicant's attorney that the information provided is necessarily prior art to applicant's invention. Moreover, applicant reserves the right to establish the patentability of the claimed invention over any of the listed documents should they be applied against the claimed invention.

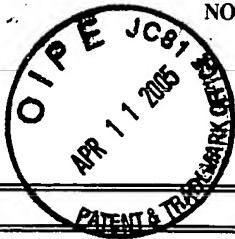
This Information Disclosure Statement is being filed after the mailing date of the first Office Action on the merits, as copies of non-patent references were evidently not included in a previous IDS; the requisite fee payment has been authorized.

Respectfully submitted,

J. Kaufman et al.

By Marc D. McSwain
Marc D. McSwain (#44,929)
Agent for Applicants
Phone (408) 927-3364

Attachments



NOTICE OF REFERENCES CITED

SERIAL NO.

GROUP ART
UNIT

10/034,523

2178

TITLE: SYSTEM AND METHOD FOR HIERARCHICAL
SEGMENTATION WITH LATENT SEMANTIC INDEXING IN
SCALE SPACE

APPLICANT(S): J. KAUFMAN ET AL.

DOCKET NO.: ARC920010089US1

U.S. PATENT DOCUMENTS

INIT.	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE

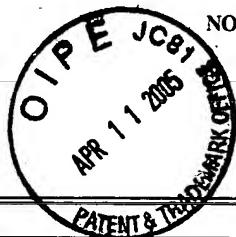
FOREIGN PATENT DOCUMENTS

INIT.	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

Jean Babaud, Andrew P. Witkin, Michel Baudin, Richard O. Duda, "Uniqueness of the Gaussian Kernel for Scale-Space Filtering", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. PAMI-8, No. 1, p. 26-33, January 1986.
F. Choi, "Advances in domain independent linear text segmentation", Proceedings of NAACL'00, Seattle, USA, April 2000.
S. Deerwester, S. Dumais, G. Furnas, T. Landauer, R. Harshman, "Indexing by Latent Semantic Analysis", Journal of the American Society for Information Science, 41, p. 391-407, 1990.
M.K. Hughey, M.W. Berry, "Improved query matching using kd trees: a latent semantic indexing enhancement", Information Retrieval (USA), Vol. 2, No. 4, 2000, p. 287-302.
Johnathan Foote, "Visualizing Music and Audio using Self-Similarity", Proceedings of ACM Multimedia'99, p. 77-80, Orlando, Florida, November 1999.

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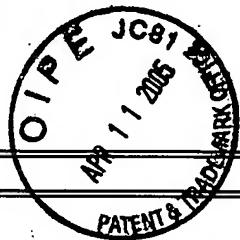
INIT.	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Marti A. Hearst, "Multi-Paragraph Segmentation of Expository Text", Proceedings of the 32 nd Annual Meeting of the Association for Computational Linguistics, 1994.
	Yee Leung, Jiang She Zhang, Zong Ben Xu, "Clustering by Scale-Space Filtering", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 22, No. 12, December 2000, p. 1396-1410.
	Richard F. Lyon, "Speech Recognition in Scale Space", Proceedings of 1984 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), San Diego, March 1984, p. 29.3.1-4.
	Malcolm Slaney and Dulce Ponceleon, "Hierarchical Segmentation Using Latent Semantic Indexing in Scale Space", Proceedings of the 2001 ICASSP, Salt Lake City, Utah, May 2001.
	Andrew P. Witkin, "Scale-Space Filtering: A New Approach to Multi-Scale Description", Proceedings of the 1984 ICASSP, San Diego, March 1984, p. 39.A.1.1-4.

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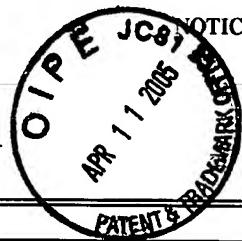
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Manmathma, R. and Srimal, N., "Scale Space Technique for Word Segmentation in Handwritten Documents", Scale-Space Theories in Computer Vision, 2 nd International Conference, Scale-Space '99, Proceedings, p. 22-33, 1999.
	Miller, N.E., Wong, P.C., Brewster, M. and Foote, H.P., "TOPIC ISLANDS(TM) - A Wavelet-Based Text Visualization System", in Ebert D., Hagan, H., and Rushmeier, H. (eds), Proceedings of IEEE Visualization '98, p. 189-196, New York, NY, Oct. 18-23, 1998, ACM Press, also available at multimedia.pnl.gov:2080/topicography/vis98paper.pdf
	S. Srinivasan et al., "What is in that video anyway? : In Search of Better Browsing", Proceedings, IEEE International Conference on Multimedia Computing and Systems, p. 388-393, Florence, Italy, June 7-11, 1999.

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	S. Dumais, "Enhancing Performance in Latent Semantic Indexing", Bellcore Technical Report TM-ARH-017527, 1990.
	S. Dumais, G. Furnas, T. Landauer, S. Deerwester, R. Harshman, "Using Latent Semantic Analysis to Improve Access to Textual Information", Proceedings of Computer Human Interaction '88, 1988.
	M. Slaney, D. Ponceleon, J. Kaufman, "Multimedia Edges: Finding Hierarchy in all Dimensions", Proceedings of 9 th ACM International Conference in Multimedia, Ottawa, Ontario, Sept. 30 - Oct. 5, 2001.
	M. Slaney, D. Ponceleon, J. Kaufman, "Temporal Events in All Dimensions and Scales", Proceedings of the IEEE Workshop on Detection and Recognition of Events in Video, July 8, 2001, Vancouver Canada.

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	M. R. Naphade et al., "A Factor Graph Framework for Semantic Indexing and Retrieval in Video", 0-7695-0695-X/00, 2000, IEEE.
	M. R. Naphade et al., "Semantic Video Indexing using a probabilistic framework", International Conference on Pattern Recognition (ICPR'00), 1051-4651/00, 2000, IEEE.
	Anni Coden et al., "Multi-Search of Video Segments Indexed by Time-Aligned Annotations of Video Content", IBM Research Disclosure 03-2000, n431191, p. 603.
	Malcolm Slaney and Dulce Ponceleon, "Hierarchical Segmentation: Finding Changes in a Text Signal", Proceedings of the SIAM Text Mining 2001 Workshop, Chicago IL, April 7, 2001, p. 6-13.

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